

Application No.:

09/639,599

Advanced Adhesive Systems, Inc., of Newington, Connecticut. The adhesive is a two part epoxy system having a substantially 1:1 resin/hardener mix by weight or volume which has a very high viscosity and cures at room temperature. This formulation upon curing has a Shore D of 40-45 and an operating temperature range of -40° F to 250° F. The adhesive 10 may also be another room temperature or heat activated adhesion system such as methacrylate, urethane, etc.

In the Claims:

Please amend claims 1, 8, 12 and 16 as follows:

1. A connection system for connecting at least one light gauge steel panel to a support structure comprising:

applying an adhesive to at least one of said panel or support structure, said adhesive being curable at room temperature and able to adhere to steel;

placing said panel against said support structure;

driving at least one fastener through the panel into said support structure;

and

allowing said adhesive to cure,

so that said panel is joined to said structure in a connection which is [superior] significantly enhanced in load bearing capacity to a connection provided only by the at least one fastener.

Application No.: 09/639,599

8. A connection system for connecting at least one light gauge steel member to a second member comprising:

applying a bead of epoxy to at least one of said members, said epoxy being curable at room temperature and able to adhere to steel;

positioning said members in adjacent relationship with said epoxy disposed between said members;

driving at least one fastener through one member into said other member;
and

allowing said epoxy to cure,

so that said members are joined in a connection which is [superior] significantly enhanced in load bearing capacity to a connection provided only by the at least one fastener.

12. The connection [epoxy] system of claim 8 [where in] wherein said epoxy comprises a resin and hardener which are mixed in substantially equal portions by volume.

16. A connection system for connecting at least one light gauge steel panel to a steel frame comprising:

applying a bead of adhesive to at least one of said panel or frame, said adhesive being curable at room temperature and able to adhere to steel;

Application No.: 09/639,599

positioning said panel against said frame with said adhesive disposed between said panel and frame;

driving at least one fastener through said panel into said frame; and

allowing said adhesive to cure,

so that said panel is joined to said frame in a connection which is [superior] significantly enhanced in load bearing capacity to a connection provided only by the at least one fastener.

Please add new claims 19-24 as follows:

19. An assembly comprising:

a support structure;

a panel of light gauge steel mounted to said support structure;

a structural adhesive curable at room temperature and disposed between said support structure and said panel;

at least one fastener driven through said panel into said support structure,

so that said panel is joined to said structure in a connection which is significantly enhanced in load bearing capacity in relation to a connection provided only by the at least one fastener.

20. The assembly of claim 19, wherein each said fastener is selected from the group consisting of self drilling screws, rivets, pins and clinches.

Application No.: 09/639,599

21. The assembly of claim 19, wherein said adhesive is a two part epoxy system.

22. An assembly comprising:
a metal support frame;
a panel of light gauge steel mounted to said support frame;
a structural adhesive curable at room temperature disposed between said support frame and said panel;
a plurality of fasteners driven through said panel into said support frame,
so that said panel is joined to said support structure in a connection which is significantly enhanced in load bearing capacity in relation to a connection provided only by the at least one fastener.

23. The assembly of claim 22, wherein the fasteners are selected from the group consisting of self-drilling screws, rivets, pins and clinches.

24. The assembly of claim 22, wherein said adhesive is a two part epoxy system.

**A CLEAN COPY OF THE AMENDED CLAIMS, ADDED
CLAIMS AND AMENDED PARAGRAPH OF THE
SPECIFICATION ARE ENCLOSED.**